



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 Sixth Avenue  
Seattle, WA 98101

April 18, 2018

Dear Petitioners:

Thank you for your petition of December 2017 to the U.S. Environmental Protection Agency requesting that EPA and the Washington Department of Ecology plan and institute a comprehensive air monitoring program from Northport to the U.S./Canada border. We have carefully considered your request. Based on our analysis of existing data we have decided we will not conduct additional air monitoring.

From our evaluation of data collected in 1999 – 2009, we believe that the risk to you from the outdoor air in Northport is low. Based on our analysis of Ecology's report<sup>1</sup> and operational improvements at the Trail facility, we expect current-day concentrations to be even lower.

Below is a technical description of our analysis of the existing data which we have used to make this decision:

EPA evaluated air data measured at a monitoring station near Northport (at Sheep Creek) for the period January 1999 to February 2009. Concentrations today are likely to be lower than those at the Sheep Creek station during that period, because of operational improvements at the Teck facility. EPA has analyzed numerous studies that compared air lead concentration to blood lead concentrations in children<sup>2</sup>. The analysis indicates that the air-associated exposure from inhalation or ingestion of lead in house dust and surface soil can lead to a blood lead level that is 5 to 10 times the value in air. Based on air results at the Sheep Creek monitoring station during the 1999-2009 monitoring period, we see 0.0242  $\mu\text{g}/\text{m}^3$  in air. This could lead to a 0.12 to 0.24  $\mu\text{g}/\text{dL}$  level of lead in blood, which is low risk.

In summary:

- For lead, the air concentration from the Sheep Creek monitoring is 0.0242  $\mu\text{g}/\text{m}^3$ , which is well below the levels expected to pose significant human health risks based on current understanding of relationships between air lead concentrations and blood lead concentrations resulting from direct and indirect exposures to air lead.

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<sup>1</sup> *Upper Columbia River Valley: Preliminary Review and Evaluation of Available Air Quality Monitoring Data and Consideration of Potential Present-Day Health Risks* (<https://fortress.wa.gov/ecy/publications/SummaryPages/1702003.html>); Ecology, March 2017

<sup>2</sup> Integrated Science Assessment (ISA) for Lead (<https://www.epa.gov/isa/integrated-science-assessment-isa-lead>); April 2017.

- For arsenic, the air concentration from the Sheep Creek monitoring is  $0.00421 \mu\text{g}/\text{m}^3$ . This level corresponds to a cancer risk of  $2 \times 10^{-5}$  (an increased risk of cancer of two in one hundred thousand for a lifetime exposure). For comparison, this is same level of risk from naturally occurring arsenic in soil.
- For cadmium, the air concentration from the Sheep Creek monitoring is  $0.00136 \mu\text{g}/\text{m}^3$ . This level corresponds to a cancer risk of  $2 \times 10^{-6}$  (an increased risk of cancer of 2 in one million for a lifetime exposure).
- For zinc, the air concentration from the Sheep Creek monitoring is  $0.0514 \mu\text{g}/\text{m}^3$ . This level is well below all risk based screening levels.

The existing air data is sufficient to conduct the human health risk assessment for the Upper Columbia River Site and, therefore, EPA will not be collecting additional air monitoring data as part of the remedial investigation and feasibility study for the Site. EPA believes that our evaluation of the potential risk to people from outdoor air, using existing air data, is technically sound.

Again, we appreciate your concern for local air quality and share your commitment to protecting public health in the Northport area. If you have any further questions, please contact me at (206) 553-8696, or Monica Tonel of my staff at (206) 553-0323.

Sincerely,



Cami Grandinetti, Program Manager  
Remedial Cleanup Program

cc: Matt Schanz, Northeast Tri County Health District  
John Roland, Washington State Department of Ecology